

BUREAU OF LAND MANAGEMENT and CALIFORNIA ENERGY COMMISSION

Stirling Engine Systems Solar Two Project
Application for Certification
Stirling Engine Systems Solar Two, LLC
08-AFC-5

INFORMATIONAL HEARING & SCOPING MEETING

BLM Rights-of-Way Application CACA-47740
November 24, 2008



Christopher Meyer, CEC Project Manager
Jim Stobaugh, BLM Project Manager



BLM's Role

■ BLM Permitting Authority

- ❖ Administration of public lands under Federal Land Policy and Management Act (FLPMA)
- ❖ Review of land use planning and processing of Land Use Plan Amendment
- ❖ California Desert Conservation Plan (1980)
- ❖ Issuance of right-of-way grants for use of federal land
- ❖ Lead federal agency for National Environmental Protection Act (NEPA), National Historic Preservation Act, and other federal law compliance



Energy Commission's Role

- **Energy Commission permitting authority**
 - ❖ Thermal power plants 50 megawatts or greater
 - ❖ Related facilities
 - transmission lines
 - substations
 - water supply systems
 - natural gas pipelines
 - waste disposal facilities
 - access roads
 - ❖ Lead state agency for California Environmental Quality Act (CEQA)



Local, State and Federal Coordination

- ❖ BLM and Energy Commission Staff work closely with local, state and federal agencies, for example:
 - Local: City or Township, if any
 - Regional: Imperial County
 - State: Department of Fish and Game, Regional Water Quality Control Board, Office of Historic Preservation, Native American Heritage Commission
 - Federal: Environmental Protection Agency, Fish and Wildlife Service, and National Parks Service



Overview of Licensing Process

1. Data Adequacy

- Minimum requirements to accept application

2. Staff Discovery and Analyses

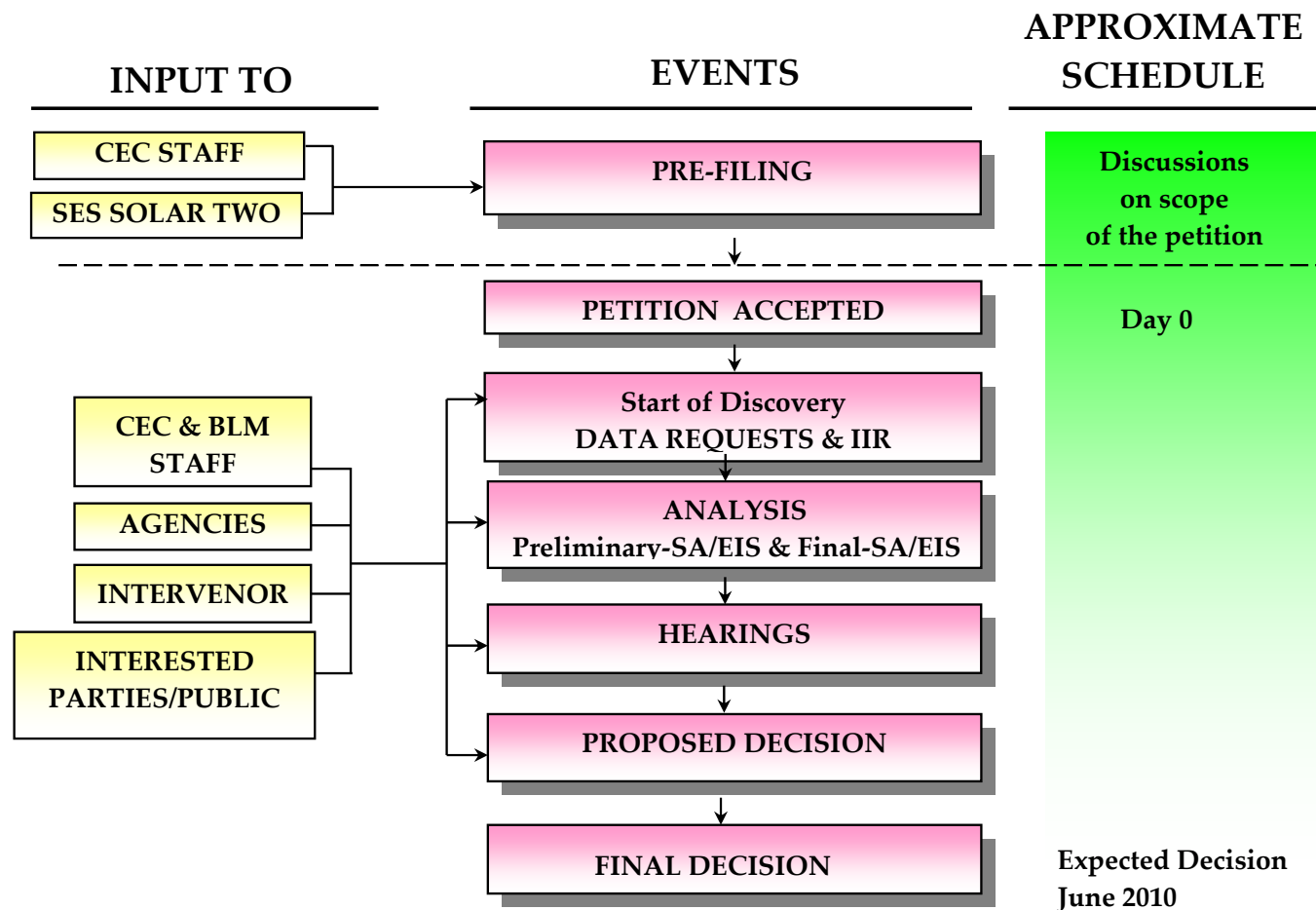
- Data requests
- Issues Identification
- Public Workshops
- Preliminary and Final Staff Assessments

3. Committee Evidentiary Hearing and Decision

- Evidentiary Hearings on FSA and other information
- Presiding Member's Proposed Decision (PMPD)
- PMPD hearing and Commission decision



California Energy Commission Process



Discovery and Analysis Process

- ❖ Determine if proposal complies with Laws, Ordinances, Regulations, Standards (LORS)
- ❖ Conduct engineering and environmental analysis
 - ❖ identify issues
 - ❖ evaluate alternatives
 - ❖ identify mitigation measures
 - ❖ recommend conditions of certification
- ❖ Facilitate public and agency participation
- ❖ Staff products: Preliminary Staff Assessment (PSA) and Final Staff Assessment (FSA)
- ❖ Make recommendations to the Committee



Evidentiary Hearing & Decision Process

- ❖ Committee conducts hearings on all information
 - Issues Presiding Member's Proposed Decision (PMPD)
 - PMPD contains findings relating to:
 - Environmental impacts, public health, engineering
 - Project's compliance with LORS
 - Recommends conditions of certification
 - Recommends whether or not to approve the project
- ❖ Full Commission makes decision
- ❖ Energy Commission monitors compliance with all conditions of certification, for the life of the project and closure





BLM Solar Energy Development Policy



- ❖ WO IM No. 2007-097 (April 4, 2007)
- ❖ Policy: facilitate environmentally responsible commercial development of solar energy projects on public lands.
- ❖ ROW applications for solar energy projects are a **high priority** and will be processed in a timely manner.
- ❖ If approved, authorize under Title V of FLPMA.
- ❖ Rent established by appraisal.
- ❖ Information on solar energy technology is available at:
<http://www.eere.energy.gov/RE/solar.html> or <http://www.nrel.gov>.



■ Ref. Handout WO- IM No. 2007- 097



Summary of BLM ROW Processing and Administration

- BLM:
 - Regulations: 43 CFR 2800
 - Right-of-Way Toolkit Information:
 - ❖ General ROW
http://www.blm.gov/wo/st/en/prog/energy/cost_recovery_regulations.html
 - ❖ Solar ROW
http://www.blm.gov/wo/st/en/prog/energy/solar_energy.html

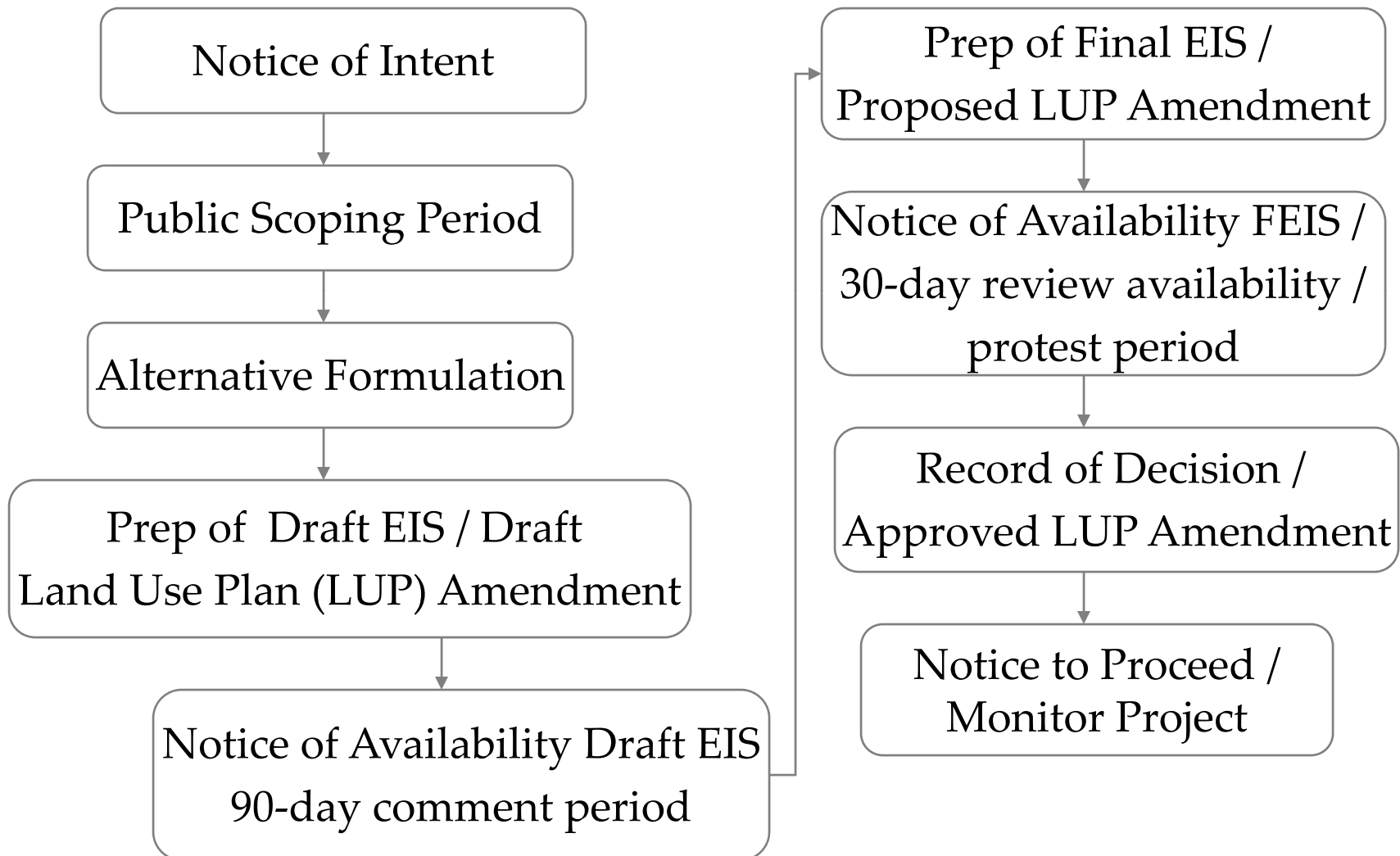


BLM Authorized Officer's Role

- ❖ Initial Response to Proposal
- ❖ Pre-application Screening
- ❖ Accept Application or Reject Proposal
- ❖ Process Application / Land Use Plan Amendment
 - ❖ - Conduct Scoping
 - ❖ - Prepare NEPA EIS document/LUP Amendment
- ❖ Decision on Application / Approve LUP Amendment
- ❖ Authorize the Use
- ❖ Administer through Termination



BLM NEPA EIS / LUP Amendment Process



Energy Commission Contacts and Web Site

- ❖ Committee Assigned
 - Jeffrey Byron, Commissioner, Presiding Member
 - Jackalyne Pfannenstiel, Chairman, Associate Member
- ❖ California Energy Commission Staff
 - Raoul Renaud, Commission's Hearing Officer
 - (916) 654-5103, e-mail: raoul.renaud@energy.state.ca.us
 - Christopher Meyer, Project Manager
 - (916) 653-1639 e-mail: christopher.meyer@energy.state.ca.us
 - Web page: www.energy.ca.gov/sitingcases/solartwo
 - Public Adviser's Office
 - (916) 654-4489 or (800) 822-6228
 - e-mail: PublicAdviser@energy.state.ca.us



BLM Contacts and Comment Web Site

- ❖ Jim Stobaugh, Project Manager
Phone: (775) 861-6478
e-mail: jim_stobaugh@blm.gov
- ❖ BLM Web Page:
<http://www.blm.gov/ca/st/en/fo/elcentro/nepa/stirling.html>
- ❖ Scoping comments to:
SES Solar Two Scoping Comments
c/o Christopher Meyer, Project Manager
California Energy Commission
1516 9th Street, MS-15
Sacramento, CA 95814-5512
Or email comments to:
christopher.meyer@energy.state.ca.us
(attention Solar Two)



Public Participation Information

- Open Public Process
 - ❖ Workshops and Hearings noticed at least 15 days in advance
 - ❖ Mailing lists
 - ❖ List Server: www.energy.ca.gov/listservers
- Documents are available for public review at:
 - ❖ Public Libraries in Imperial County, Eureka, Sacramento, San Francisco, Fresno, Los Angeles and San Diego
 - ❖ Energy Commission Library in Sacramento
 - ❖ Energy Commission Web site:
www.energy.ca.gov/sitingcases/solartwo
 - ❖ Dockets Unit at the Energy Commission
1516 9th Street, MS - 4
Sacramento, CA 95814-5512





Public Participation Opportunities

- ❖ Submit written comments or statements to the Commission
- ❖ Provide oral comments at public meetings
- ❖ Participate in workshops
- ❖ Become a formal intervenor (Contact Public Advisor's Office)
- ❖ Provide written comments on Scoping, the PSA/DEIS, FSA/FEIS and PMPD



Energy Commission Project Web Page



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Project Proceeding

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Siting Division Reports & Publications

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SES Solar Two Project

Docket Number: 08-AFC-5
(Application For Certification)

Committee Overseeing This Case:

Jeffrey Byron, Commissioner Presiding Member	Jackalynne Pfannenstiel, Chairman Associate Member
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Hearing Officer: tba

- [BLM Project Page](#)

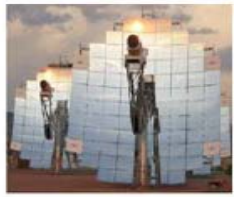
Key Dates

- October 08, 2008 - Commission accepts Application as complete and "data adequate."
- June 30, 2008 - Application for Certification filed.

General Description of Project

On June 30, 2008, [Stirling Energy Systems Solar Two, LLC \(SES Solar Two, LLC\)](#) submitted an Application for Certification (AFC) to construct and operate the Stirling Energy Systems Solar Two project (SES Solar Two), a solar dish Stirling systems project in Imperial County, California.

The proposed SES Solar Two project would be a nominal 750-megawatt (MW) Stirling engine project, with construction planned to begin either late 2009 or early 2010. Although construction would take approximately 40 months to complete, renewable power would be available to the grid as each 60-unit group is completed. The primary equipment for the generating facility would include the approximately 30,000, 25-kilowatt solar dish Stirling systems (referred to as SunCatchers), their associated equipment and systems, and their support infrastructure. Each SunCatcher consists of a solar receiver heat exchanger and a closed-cycle, high-efficiency Solar Stirling Engine specifically designed to convert solar power to rotary power then driving an electrical generator to produce grid-quality electricity. The 6,500 acre project site is located on approximately 6,140 acres of federal land managed by the Bureau of Land Management (BLM) and approximately 360 acres of privately owned land. The site is approximately 100 miles east of San Diego, 14 miles west of El Centro, and approximately 4 miles east of Ocotillo Wells.



< Nov 2008 >

S	M	T	W	T	F	S
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02	03	04	05	06	07	08
09	10	11	12	13	14	15
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23	24	25	26	27	28	29
30						

Calendar
November 24, 2008
[Notice of Informational Hearing and Public Site Visit and Bureau of Land Management Scoping Meeting for the Solar Two Power Project](#)

List Server

To subscribe to this proceeding's e-mail ListServer, enter the following information completely:

Note: Your first & last name and e-mail address must be exact and complete. Incorrect or incomplete addresses will not work. You will receive a confirmation e-mail to confirm your subscription.



BLM Project Web Page

The screenshot shows the BLM website interface. At the top, it says "U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT". Below this is a navigation bar with "California" and "El Centro Field Office". A search bar is on the left. The main content area is titled "Stirling Energy Systems Solar Two Project". The text describes the project's location in Imperial County, California, and its goal of generating 750 megawatts of renewable power. It details the project's phases, the SunCatcher technology, and the proposed transmission line and water supply pipeline.

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

California

Search BLM Go

BLM>California>El Centro>NEPA>Stirling

Print Page

El Centro Field Office

Stirling Energy Systems Solar Two Project

Stirling Energy Systems (SES) has submitted an application to the Bureau of Land Management (BLM) for development of the proposed SES Solar Two Project, a concentrated solar electrical generating facility capable of generating 750 megawatts (MW) of renewable power. The proposed SES Solar Two Project site is located on approximately 6,140 acres of federal land managed by the BLM and approximately 300 acres of privately owned land.

The project site is in Imperial County, California, approximately 4 miles east of Ocotillo, and 14 miles west of El Centro. Generally, the proposed site boundary is the Union Pacific Railroad on the north and Interstate 8 on the south. The eastern boundary is approximately 1½ mile west of Dunaway Road; and the western boundary is the westerly section line in Section 22 in Township 16 South, Range 12 East. An additional 125 acre construction area is located east of Dunaway Road.

The project would be constructed in two phases. Phase I of the project would consist of up to 12,000 SunCatchers with a nominal generating capacity of 300 MW. Phase II would consist of approximately 18,000 SunCatchers, expanding the project to approximately 30,000 SunCatchers, with a total generating capacity of 750 MW.

The SunCatcher is a 25-kilowatt solar dish that is designed to automatically track the sun and collect and focus solar energy onto a power conversion unit (PCU), which generates electricity. The system consists of a 38' high by 40' wide solar concentrator in a dish structure that supports an array of curved glass mirror facets. These mirrors collect and concentrate solar energy onto the solar receiver of the PCU.

The proposed SES Solar Two Project also includes an electrical transmission line, water supply pipeline, and a site access road. A new 230-kV substation would be constructed approximately in the center of the project site. This new substation would be connected to the existing SDG&E Imperial Valley Substation via an approximately 10.3 mile, double-circuit, 230 kV transmission line. Approximately 7.56 miles of the new line would be constructed offsite. Other than this interconnection transmission line, no new transmission lines or off-site substations would be required for the 300 MW Phase I construction. The full Phase II expansion of the project, and delivery of the additional renewable power to the San Diego regional load center, would require the construction of the 500 kV Sunrise Powerlink transmission line proposed by SDG&E. The off-site 6-inch diameter water supply pipeline would be constructed a distance of approximately 3.4 miles from the Westside Main Canal to the project boundary. The water pipeline would be routed in the Union Pacific Railroad right-of-way (ROW), or adjacent to this ROW on federal and private lands. A site access road would be constructed from Dunaway Road to the eastern boundary of the project site, generally following an existing road.



STAFF ISSUES IDENTIFICATION REPORT

■ Purpose

- ❖ Inform Participants of Potential Issues
- ❖ Early Focus
- ❖ Not Limiting

■ Criteria

- ❖ Amendment Petition
- ❖ Data Requests
- ❖ Information provided by Agencies or other Participants at this point in the process



Potential Issue Areas

SES Solar Two Project

- ❖ Cultural Resources
- ❖ Land Use
- ❖ Visual Resources
- ❖ Cumulative Effects and Alternatives



Cultural Resources

Potential Issues

- ❖ High Frequency of Cultural Resources (number and density)
- ❖ Potential for Unanticipated Discoveries
- ❖ Mitigation of Potential Significant Impacts
- ❖ Cumulative Impacts



Land Use Potential Issues

- ❖ Exclusive use of 6,140 acres of public land could eliminate other BLM authorized land uses
- ❖ Land within the 360-acre portion of private land designated as Recreation/Open Space
- ❖ Cumulative Impacts



Visual Resources

Potential Issues

- ❖ New intrusions on the landscape from 30,000 SunCatchers on over 6,500 acres
- ❖ Development of VRM classification



Cumulative Effects and Alternatives Issues

- ❖ NEPA and CEQA requirements for analysis of the environmental impacts of the proposed project and other proposed projects in the desert would include a cumulative effects review of all proposed projects.
- ❖ Alternatives to a proposed project including no action.



PROPOSED SCHEDULE

DATE	MILESTONE / EVENT
8-Oct-2008	Commission determined AFC is complete
14-Nov-2008	Staff filed Data Requests Set 1
17-Nov-2008	Staff filed Issues Identification Report
24-Nov-2008	Informational Hearing/Scoping Meeting and Site Visit
9-Dec-2008	Applicant Files Data Responses
18-Dec-2008	Data Response Issue Resolution Workshop/Scoping
15-Jan-2009	Staff filed Data Requests Set 2
15-Feb-2009	Applicant Files Data Responses Set 2
5-Mar-2009	Staff files Preliminary Staff Assessment (PSA)/DEIS
26-Mar-2009	PSA/Draft EIS Workshop
5-Jun-2009	Close BLM Comment Period on Draft EIS
1-Sep-2009	Staff files Final Staff Assessment (FSA)/EIS
TBD	Committee conducts Evidentiary Hearing
TBD	Presiding Member's Proposed Decision (PMPD)
TBD	Committee Hearing on the PMPD
TBD	BLM Files Record of Decision (ROD)
TBD	Committee files revised PMPD
TBD	Commission Decision



Staff's Proposed Schedule

- Meeting this schedule will depend on:
 - ❖ Applicant's timely response to staff's data requests
 - ❖ Determinations by other local, state, and federal agencies
 - ❖ Timely preparation of required documents
 - ❖ Protests received during the NEPA comment period
 - ❖ Other factors not yet known

